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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,811	02/07/2002	Theodore Conard	CSCO-69301	2828

7590 01/26/2007  
WAGNER, MURABITO & HAO LLP  
Third Floor  
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San Jose, CA 95113

EXAMINER
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MEUCCI, MICHAEL D

ART UNIT	PAPER NUMBER
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2142

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/26/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/071,811	<b>Applicant(s)</b> CONARD ET AL.	
	<b>Examiner</b> Michael D. Meucci	<b>Art Unit</b> 2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is in response to the request for reconsideration filed 30 October 2006.
2. Claims 1-26 remain pending.

### ***Response to Amendment***

3. The examiner acknowledges the amendments made to claims 1, 8, 15, and 22 to overcome claim rejections under 35 U.S.C. 112, first paragraph. These rejections have been withdrawn.
4. The examiner acknowledges the amendment made to claim 15 to overcome the objection for minor informalities. This objection has been withdrawn.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 5, 8, 12, 15, 19, 22, and 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews Jr. et al. (U.S. 6,457,125 B1) hereinafter referred to as Matthews in view of Fletcher et al. (U.S. 6,009,274) hereinafter referred to as Fletcher, and Richman et al. (U.S. 5,655,148) hereinafter referred to as Richman.

a. As per claims 1, 8, 15, and 22, Matthews teaches: storing a first hardware configuration of a networked communications device ("existing configuration of the programmable logic blocks" of lines 45-46 of column 1); receiving a second hardware configuration over a network, wherein said second hardware configuration is received into a memory of said networked communications device (lines 42-50 of column 1); and programming a programmable logic unit on said networked communications device according to said second hardware configuration (lines 42-67 of column 1).

Matthews does not explicitly teach a checksum and timestamp indicating when said first hardware configuration was received; performing the checksum operation on said second hardware configuration to verify a received copy of said second hardware configuration; creating a timestamp associated with said second hardware configuration to indicate when said second hardware configuration was received; wherein said programming occurs in conjunction with a boot process initiation if said second hardware configuration has a correct checksum and a more recent associated timestamp than said first hardware configuration; and wherein said programmable logic unit is coupled with said network communications device via a removable card, and wherein said removable card is removably attached to said networked communications device.

However, Fletcher discloses: "In one embodiment, ASU agents receive the broadcast information and compare the latest version information with the version levels of the components that they are currently running," (lines 53-56 of column 10). It would have been obvious to one of ordinary skill in the art at the time of the applicant's

invention to include timestamps for determining if the correct hardware configuration is present. "If there is any discrepancy, ASU agents with down version components (components that are indicated outdated) respond by requesting updated versions accordingly, and await to be updated upon a scheduled Auto update time slot. A discrepancy exists, for example, where the version of one or more software components currently running at the agent (end system) are older than, or outdated by, the latest or newest version available from the ASU server as indicated in the advertisement(s) received from the ASU server. A discrepancy also exists where no current version of the advertised software component exists at the agent (end system)," (lines 56-67 of column 10 in Fletcher. It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to include timestamps for determining if the correct hardware configuration is present.

Richman discloses: "The checksum field is used to insure that no conflicts have occurred while reading the identification code from the board containing the device(s) 20," (lines 18-20 of column 38). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to include a checksum field for determining if the correct hardware configuration is present. "A checksum verification operation is conducted when the serial data is acquired from the device 20 by the computer 8. The use of a checksum is a conventional technique for detecting data transfer errors," (lines 20-23 of column 38 in Richman). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been

motivated to include a checksum field for determining if the correct hardware configuration is present.

Richman discloses: "The event detect element typically can detect the installation of a new device on the assigned system bus or the removal of an existing device. For example, device installation or removal can be detected by intercepting a particular interrupt signal or by periodically polling all of the available sockets of the bus to determine the installed devices. Likewise, the event detect element can detect the insertion of a computer into or the removal of a computer from a docking station," (lines 29-37 of column 7).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the programmable logic unit is coupled with said network communications device via a removable card, and wherein said removable card is removably attached to said networked communications device. Motivation comes from the simple interchangeability for ease of reconfiguration (see lines 43-51 of column 4 in Richman). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have the programmable logic unit is coupled with said network communications device via a removable card, and wherein said removable card is removably attached to said networked communications device in the system as taught by Matthews.

b. As per claims 5, 19, and 26, Matthews teaches: said method further comprises verifying security information (line 57 of column 3 through line 9 of column 4).

c. As per claim 12, Matthews teaches: said method further comprises verifying security information (line 57 of column 3 through line 9 of column 4).

7. Claims 2-4, 9-11, 16-18, and 23-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, Fletcher, and Richman as applied to claims 1, 8, 15, and 22 respectively above, in view of Collins (U.S. 5,671,355).

a. As per claims 2-3, 9-10, 16-17, and 23-24, Matthews does not explicitly teach: said networked communications device is a router or a switch. However, Collins discloses: "With this basic design, the reconfigurable network interface 10 has not only the capacity to provide different protocol support such as ARCNet, Ethernet, Token Ring, etc., but also has the ability to take on multi-level communications capabilities and thus perform the function of a hub, bridge, router, brouter, or gateway," (lines 29-34 of column 11). A router has all the capabilities of a switch; therefore, a switch can be considered a subset of routers. In this instance, the router disclosed in Collins teaches all limitations of the switch.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have the networked communications device as a router or a switch. "Once the physical and datalink layers of the OSI model are established by the means of the reconfigurable bus interface 22 and reconfigurable transceiver 14, the reconfigurable network interface 10 is capable of providing the remaining layers of the OSI model through software emulation with the reconfigurable controller 12," (lines 23-29 of column 11 in Collins). It is for this reason that one of ordinary skill in the art at the

time of the applicant's invention would have been motivated to have the networked communications device as a router or a switch in the system as taught by Matthews.

b. As per claims 4, 11, and 18, Matthews teaches: storing said first hardware description in non-volatile memory (lines 37-46 of column 1).

Matthews does not explicitly teach: collecting information, wherein a component of said networked communications device sends a configuration description to a processor of said networked communications device; and creating said first hardware description, wherein said processor creates said first hardware description using said configuration description. However, Collins discloses: "Such a device without the network and bus type determination means 25 would require that configuration information be chosen manually. Such manual configuration would use a configuration program running on the host computer and may include a questionnaire providing a list of check boxes listing all possible configuration setup parameters. The user would simply check the appropriate boxes or other user interface devices in order to send the desired configuration information to the interface device 10 through the host computer bus, or to send configuration information stored on-board in non-volatile memory 20 to the desired reconfigurable element 12, 14, or 22," (lines 19-31 of column 8).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to collect information, wherein a component of said networked communications device sends a configuration description to a processor of said networked communications device; and create said first hardware description, wherein said processor creates said first hardware description using said configuration



description. "Once the bus type and network type are identified, the configuration controller 46 directs configuration instructions preferably stored in EPROM 20 to the particular reconfigurable device 12, 14, or 22 addressing each through the configuration address bus 34. The network and bus type determination means 25 may be implemented with a neural net processor such as an Intel NI1000 Recognition Accelerator or Bell Labs NET32K processor or any other device which provides the required monitoring, comparison, and controller functions," (lines 51-60 of column 7 in Collins). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to collect information, wherein a component of said networked communications device sends a configuration description to a processor of said networked communications device; and create said first hardware description, wherein said processor creates said first hardware description using said configuration description in the system as taught by Matthews.

c. As per claim 25, Matthews does not explicitly teach: collecting a configuration description of a component of said networked communications device and a means for using said configuration description in creating said first hardware description. However, Collins discloses: "Although the preferred form of the invention as shown in FIG. 1 includes separate network and bus type determination means 25 and external configuration input means 52, a device embodying the principles of the invention could include only the external input 50, port 48, and external configuration input means 52 through which configuration information is loaded into each of the reconfigurable devices, reconfigurable controller 12, reconfigurable transceiver 14, and

reconfigurable bus interface 22. Such a device without the network and bus type determination means 25 would require that configuration information be chosen manually. Such manual configuration would use a configuration program running on the host computer and may include a questionnaire providing a list of check boxes listing all possible configuration setup parameters. The user would simply check the appropriate boxes or other user interface devices in order to send the desired configuration information to the interface device 10 through the host computer bus, or to send configuration information stored on-board in non-volatile memory 20 to the desired reconfigurable element 12, 14, or 22," (lines 11-31 of column 8).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to collect a configuration description of a component of said networked communications device and have a means for using said configuration description in creating said first hardware description. "Once the bus type and network type are identified, the configuration controller 46 directs configuration instructions preferably stored in EPROM 20 to the particular reconfigurable device 12, 14, or 22 addressing each through the configuration address bus 34. The network and bus type determination means 25 may be implemented with a neural net processor such as an Intel NI1000 Recognition Accelerator or Bell Labs NET32K processor or any other device which provides the required monitoring, comparison, and controller functions," (lines 51-60 of column 7 in Collins). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to collect a configuration description of a component of said networked communications device and

have a means for using said configuration description in creating said first hardware description in the system as taught by Matthews.

8. Claims 6-7, 13-14, and 20-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, Fletcher, and Richman as applied to claims 1, 8, and 15 respectively above.

a. As per claims 6, 13, and 20, Matthews does not explicitly teach: configuring said networked communications device with a schedule for initiating said receiving. However, Fletcher discloses: "In one embodiment, ASU agents receive the broadcast information and compare the latest version information with the version levels of the components that they are currently running. If there is any discrepancy, ASU agents with down version components (components that are indicated outdated) respond by requesting updated versions accordingly, and await to be updated upon a scheduled Auto update time slot," (lines 53-60 of column 10).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to configure the networked communications device with a schedule for initiating the receiving of the second hardware configuration. "An update control file in the ASU server controls the scheduling of the update process. The control file controls the number of nodes (agents) that are updated and when they are updated. For example, if thousands of agents require updating, the control file can schedule updating to be done one agent at a time, or several agents at a time (burst-mode), or even all agents at once," (lines 27-33 of column 12 in Fletcher). It is for this reason that one of

ordinary skill in the art at the time of the applicant's invention would have been motivated to configure the networked communications device with a schedule for initiating the receiving of the second hardware configuration in the system as taught by Matthews.

b. As per claim 7, 14, and 21, Matthews does not explicitly teach: comparing the first hardware configuration with the second hardware configuration. However, Fletcher discloses: "In one embodiment, ASU agents receive the broadcast information and compare the latest version information with the version levels of the components that they are currently running," (lines 53-56 of column 10).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to compare the first hardware configuration with the second hardware configuration. "If there is any discrepancy, ASU agents with down version components (components that are indicated outdated) respond by requesting updated versions accordingly, and await to be updated upon a scheduled Auto update time slot," (lines 56-60 of column 10 in Fletcher). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to compare the first hardware configuration with the second hardware configuration in the system as taught by Matthews.

### ***Response to Arguments***

9. Applicant's arguments filed 30 October 2006 have been fully considered but they are not persuasive.

10. (A) Regarding claims 1, 8, 15, and 22, the applicant contends that Matthews, Fletcher, and Richman all fail to teach: wherein said programmable logic unit is coupled with said network communications device via a removable card, and wherein said removable card is removably attached to said networked communications device. The examiner respectfully disagrees.

As to point (A), the examiner points to lines 29-37 of column 7 in Richman which disclose: "The event detect element typically can detect the installation of a new device on the assigned system bus or the removal of an existing device. For example, device installation or removal can be detected by intercepting a particular interrupt signal or by periodically polling all of the available sockets of the bus to determine the installed devices. Likewise, the event detect element can detect the insertion of a computer into or the removal of a computer from a docking station." It should be clear from this portion of Richman that the "network device" and/or the "modem device" is being described. Not only does Richman teach this limitation, but the examiner holds in high regard that this limitation is so well known in the art, no further consideration is required.

### ***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ellis, III (U.S. 7,024,449 B1) discloses reconfigurable circuitry in network systems.

Cooke et al. (U.S. 7,100,124 B2) discloses Virtual Socket Interface Alliance (VSIA) standard.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Meucci at (571) 272-3892. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell, can be reached at (571) 272-3868. The fax phone number for this Group is 571-273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [michael.meucci@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

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